Protection of Sub-soil Water

*34. SHRI T.T.V. DHINAKARAN: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether Government are aware that salinisation of sub-soil water is taking place in the coastal region and even in interior areas;

(b) whether Government have assessed the impact of this salinisation of sub-soil water in the country;

(c) if so, the details thereof; and

(d) the steps taken/proposed to be taken by Government to protect sub-soil water?

THE MINISTER OF WATER RESOURCES (SHRI PRIYARANJAN DASMUNSI): (a) to (d) Studies carried out by the Central Ground Water Board (CGWB) and the State Ground Water Departments have indicated salinisation of ground water in some parts of the States of Andhra Pradesh, Goa, Gujarat, Karnataka, Maharashtra, Orissa, Tamil Nadu, West Bengal and Union Teritory of Pondicherry.

Details of State-wise impact of this salinisation is as follows:—

Andhra Pradesh: Salinity in ground water has been noticed in parts of coastal districts fo East Godavari, West Godavari, Prakasam, Visakhapatnam, Guntur and Krishna.Salinity in these areas has its genesis to the inherent marine deposition and is not due to sea water intrustion.

Goa: Low lying estuarine regions of various west flowing rivers in the State are affected by salinity ingress due to tidal inflow.

Gujarat: Due to progressive sea water intrusion, the quality of ground water is steadily deteriorating in coastal tracts of Kachchh and Saurashtra.

Karnataka: Three districts viz. Uttara Kannanda, Udupi and Dakshina Kannada are affected by the problem of salinity ingress in ground water due to tidal inflow along the backwater channels.

Kerala: Salinity of ground water in shallow aquifer has been noticed in small pockets in Chellanam and Parur areas of Ernakulam district

and Azhikkode area of Trichur district. Salinity in these areas is due to the influence of tidal waters. In deeper aquifers, the brackishness in the formation water is mainly due to leaching of salts from the aquifer materials.

Maharashtra: Instances of salinisation of sub-soil water have been reported in localized pockets of coastal districts of Thane, Mumbai, Raigarh, Ratnagiri and Sindhudurg.

Orissa: The extreme southern portion of the coastal sedimentary tract indicates a marginal quality of water and the salinity increases towards Puri. Southwest of Chilka, quality of formation water is marginal to saline with a fresh water zone along the top. In and around Puri, brackish water is seen sandwiched between the fresh water zones. Salinity problem in these areas is inherent and not due to sea water intrusion.

Tamil Nadu: Salinisation of ground water due to ingrees of sea water, caused by excessive withdrawals of ground water from coastal aquifers has been observed in parts of Minjur block, Thiruvallur district and near Kottam, Radhapuram block in Tirunelveli district.

West Bengal: Problem of inland salinity has been observed in parts of Haldia area of East Medinipur district. No saline water ingress has been noticed in the area.

Pondicherry: Sea water intrusion in coastal aquifers has been reported in parts of Pondicherry region of Union Territory of Pondicherry.

'Water' being a State subject, it is primarily the responsibility of the State Governments concerned to take steps to protect sub-soil water. The steps taken/proposed to be taken by the State Government concerned/Union Government in this regard are as follows:—

Andhra Pradesh: Under Andhra Pradesh Water, Land & Trees Act, 2002, construction of new wells has been banned in coastal areas in order to prevent upconing of saline ground water from deeper aquifers. No new electric connections are given to lift ground water in these areas. Research & Development programme on injection of fresh water during floods in the river and canals has shown positive results.

Goa: Construction of marginal bunds along the bank of rivers in estuarine region to arrest the inundation by saline water during high tide in low lying areas and construction of bandharas/barrages across the rivers to stop the ingress saline water to deep inland has been undertaken by Government of Goa.

Gujarat: Government of Gujarat had constituted two High Level Committees to study the salinity problem of Saurashtra and Kachchh regions and to suggest remedial measures thereof. The Committees have recommended various remedial measures like construction of tidal regulators, bandharas, recharge trenches, recharge wells, recharge reservoirs, spreading channels etc. Construction of such works has been taken by the Government of Gujarat.

Karnataka: State Government in coordination with the Zila Panchayats is undertaking construction of tidal regulators across the rivers and rivulets to avoid saline ingress through the rivers during summer months.

Kerala: State Government is constructing tidal regulators and check dams across the backwater channels to prevent movement of tidal waters inland.

Maharashtra: In Kelve Mahim area of Thane district, sweet water zone area has been demarcated. Sinking of new wells and energisation of pump sets on existing wells have been restricted to avoid sea water intrusion due to heavy pumping.

Orissa: Under the Central Sector Scheme of 'Study of Recharge to Ground Water' implemented during the IX Plan, construction of tidal regulators and desilting of creeks was taken up in Bhadrak, Kendrapara and Puri districts of Orissa to arrest saline water intrusion.

Tamil Nadu: Withdrawal of ground from Minjur well field has been stopped. Obtaining a license for sinking of wells and energizing them with pump (>1 HP) has been made mandatory in the area falling under jurisdiction of Chennai Metropolitan Development Area. Installation of rain water harvesting has been made mandatory for all buildings in Tamil Nadu. Chennai Metropolitan Water Supply & Sewerage Board has carried out pilot study on the possibility of arresting sea water through injection of fresh water into the aquifer through tubewells, which showed improvement of ground water quality.

West Bengal: The Central Ground Water Authority (CGWA) has notified Haldia area of East Medinipur district of West Bengal for the purpose of regulation and control of ground water management and development to check sea water intrusion.

Pondicherry: The Pondicherry Government has constituted the Pondicherry Ground Water Authority to control and regulate ground water development. Extraction of ground water for industrial and irrigation uses from wells within 6 km of the coastline has been banned. Installation of rain water harvesting has been made mandatory for all buildings.

Discussion with Pakistan on Pipeline Project

*35. SHRIMATI AMBIKA SONI:
DR. T. SUBBARAMI REDDY:

Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) whether he visited Pakistan in the month of May to discuss core issue of import of LNG through $4.16 billion Iran-Pakistan-India gas pipeline project;

(b) if so, what is the outcome of discussions held between two countries;

(c) what other steps were discussed and agreements reached between the two countries;

(d) whether he had also discussions regarding route of pipeline and transit fee with Pakistan; and

(e) if so, whether on this issue also final agreement has been reached?

THE MINISTER OF PETROLEUM AND NATURAL GAS (SHRI MANI SHANKAR AIYAR): (a) to (e) The Minister of Petroleum and Natural Gas and Panchayati Raj visited Pakistan at the invitation of the Minister for Petroleum and Natural Resources of Pakistan, between 5-7 June, 2005. The two Ministers reviewed the Iran-Pakistan-India gas pipeline proposal. They agreed that the project, which envisages the supply of gas to